

BBR is a perennial wetland bayou that runs northeast to southwest in East Baton Rouge Parish -

just north of the city of Baton Rouge - to Scotlandville, Louisiana. The section of the bayou under

investigation extends from the intersection with U.S. Highway 61 to the point at which the bayou

forks, about 1/4 mile north of Hall-Buck Marine Road, into Devil's Swamp. The section of BBR that

is being investigated is a major topographic feature that borders PPI and Schuykill.

Documented releases to the bayou next to PPI and Schuykill have been previously observed.

Elevated concentrations of chlorinated hydrocarbons, as well as inorganic compounds, have been

detected in sediment and surface water samples collected during previous investigations of BBR

(Ref. 3, pp. 1 and 14-17; Ref. 4; Ref. 5).

In 1991, the U.S. House of Representatives passed a resolution to urge and request EPA to

conduct a PA of BBR and designate it as a "Superfund site" (Ref. 8). In May 1992, a PA of BBR

was submitted to EPA that recommended that an SI be conducted to determine the extent of

contamination and the potential threat to human and environmental targets.

An SI sampling inspection conducted by PRC in October 1992 detected elevated concentrations

of chlorinated organics and inorganic compounds in sediment and surface water samples collected

from BBR. The main pathway of concern is surface water migration. Observed releases of organic

compounds including (1) hexachlorobenzene, (2) hexachlorobutadiene, (3) chlorobenzene,

(4) 1,2-dichloroethene (total), and (5) vinyl chloride, have been documented in the sediments of BBR.

Observed releases of inorganic compounds including (1) lead, (2) arsenic, (3) cadmium,

(4) chromium, (5) nickel, and (6) zinc were also documented in the sediments of BBR. Additionally,

lead and mercury contamination have also been detected in the surface water of the bayou. The

presence of hazardous substances in the sediments of BBR may present a significant threat to human

food chain and environmental targets (Ref. 3, p. 1, 2, 4, and 6; Ref. 14, p. 3; Ref. 15, p. 1; Ref. 23; Ref. 24; Ref. 25). Observed contamination was detected from 250 feet upstream of NPC's northern property boundary at the Scenic Highway site to 500 feet downstream of NPC's barrow pit bridge. Chemical analyses detected concentrations of up to 49,000 $\mu\text{g}/\text{kg}$ of HCB, 65,000 $\mu\text{g}/\text{kg}$ of HCBD, and 1,410 mg/kg of lead in the sediment samples collected from BBR. Surface water samples collected from BBR contained up to 82.9 $\mu\text{g}/\text{L}$ of lead, and 107 pg/L of mercury.